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- 16 structure.
- 17 Q. So you don't know; but even if we find
- 18 some, you don't think it matters.
- 19 A. I can tell you I didn't -- from where I
- 20 went, I didn't see any significant
- 21 tears.

- 22 Q. Do you know what the mold readings are
- in that crawlspace?

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- 1 A. I would imagine them to be pretty high.
- 2 But no, I do not know, no, sir.
- 3 Q. And you don't think the presence of
- 4 mold there would have any impact
- 5 whatsoever on the presence of mold in
- 6 the walls?
- 7 A. Well, the wall cavities are not
- 8 connected to the basement, so --
- 9 Q. But your theory is air movement is what
- 10 causes condensation and mold formation;
- 11 right?
- 12 A. The air movement brings in the
- 13 moisture; the moisture on the material
- is what provides the mold formation.
- 15 Q. Right. And the mold is just -- mold
- spores are in the air everywhere:
- 17 right?
- 18 A. I would agree that mold spores are in
- 19 the air everywhere.
- 20 Q. So would you agree with me that if Page 68

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- 21 there were found to be very high
- 22 concentrations of mold in the
- 23 crawlspace, that it is possible that

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- 1 air could migrate from under there to
- 2 the wall cavities and deposit in the
- 3 wall?

- 4 A. Not without showing specific evidence
- 5 that there was a pathway for that to
- 6 occur.
- 7 Q. Well, how does the air get in the wall
- 8 generally?
- 9 A. Generally, it's going to be from the
- 10 exterior of the home, the outside of
- 11 the home.
- 12 Q. Where?
- 13 A. Well, you've got -- the way the
- sheathing is installed, there's gaps
- 15 between the sheathing that's not
- 16 sealed. There's electrical pathways
- 17 through -- periodically through the top
- 18 plate as well as some from the bottom
- 19 plate.
- 20 Q. And you don't think any of that
- 21 communicates in any way with the
- 22 crawlspace?
- 23 A. If the bottom board is torn and

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	87 ***UNCERTIFIED ROUGH DRAFT COPY***
1	Southern Energy didn't seal their
2	penetrations like I'm typically aware
3	of them doing, then that would offer an
4	opportunity to one area, whatever that
5	cavity is that has that one
6	penetration; but you still have to have
7	a driving force that's not only going
8	to move the moisture, but it's going to
9	bring that mold spore into that cavity.
10	Typically, the underbelly and the
11	crawlspace of the home is considerably
12	cooler, so you don't have so much the
13	hot moving to cold. So you also have
14	to identify some kind of driving force
15	that's going to suck that air from the
16	belly or from the basement through
17	the belly, which the ductwork is
18	located in the belly. And there's
19	always going to be some minor duct
20	leakage, so that belly is pressurized,
21	pushing the crawlspace air back out.
22	If I had enough air movement from the
23	crawlspace coming through that basement
	UNCERTIFIED ROUGH DRAFT COPY
	88 ***UNCERTIFIED ROUGH DRAFT COPY***
т	to not foto the well and and all

to get into the wall and -- and see the

2 types of readings that I experienced

during my testing, I would expect to 3

4		982parks.rough depo.txt
4		have a floor problem somewhere as well
5		underneath some vinyl in the bathroom,
6		kitchen, or somewhere.
7	Q.	Well, let's go back to my question.
8		And the more directly you can answer
9		my I don't mean to criticize you.
10		But the more directly you can answer,
11		the shorter our time will be here
12		today.
13		Is it possible that mold
14		accumulation in the crawlspace is
15		finding its way into one or more of the
16		exterior walls?
17		MR. GOULD: Object to the
18		form of the form.
19		Hypothetical. You can
20		answer.
21	Q.	Is it possible? Yes or no.
22	Α.	Only no, it's not a yes or no
23	-	question. Yes, it's possible if the
	,	***UNCERTIFIED ROUGH DRAFT COPY***
		UNCERTIFIED ROUGH DRAFT COPY
1	,	other parameters are available path
2		and a driving force to pull it in
3		there. It is not probable.

4 Q. What is the -- identify for me from a
5 list standpoint the driving forces that

6 cause condensation formation on the

7 back sides of wallboards.

8 A. First off, it is a balance of how much

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9	air	can	come	in	versus	how	much	can	

- 10 pass through. When the amount of
- 11 moisture that's migrating into the wall
- 12 exceeds the ability of that wall to
- dry -- in this case, to the inside --
- 14 then you're going to have moisture
- 15 accumulation occur.
- 16 Q. I don't think you answered my question.
- 17 What are the driving forces? Let's
- just come up with a list. Driving
- 19 force one, would you agree negative
- 20 pressure?

- 21 A. If you have the -- first off, the
- 22 foundation has to be set that when more
- comes in than can pass through. Now,

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- what causes more to come in than can
- 2 pass through. In this situation where
- 3 we have a vinyl covering on the inside,
- 4 there are things that can make it worse
- 5 in some -- as you've gracefully said in
- 6 the past, accelerate the condition.
- 7 Yes, negative pressure is one of them
- 8 that can accelerate the condition.
- 9 Q. What are some others? You say that hot
- goes to cold and wet goes to dry?
- 11 A. That's correct.
- 12 Q. What are -- I mean, that doesn't mean
- anything to me scientifically. What

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- 14 are you expressing there? What law of
- 15 nature, thermodynamics --
- 16 A. Second --
- 17 Q. Go ahead.
- 18 A. Second Law of Thermodynamics is what
- describes the -- basically I've heard
- 20 it described as the law of equilibrium,
- 21 which states that energy moves from a
- greater state to a lesser state,
- 23 whether that be heat transfer, moisture

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- 1 transfer, wet moving to dry, hot moving
- 2 to cold.

- 3 Q. Which law of thermodynamics is that?
- 4 A. That's the Second Law of
- 5 Thermodynamics, as I appreciate it.
- 6 Q. And can you define for me the Second
- 7 Law of Thermodynamics?
- 8 A. I thought I just did.
- 9 Q. So that's your definition?
- 10 A. Yes, sir.
- 11 Q. And what is entropy?
- 12 A. The enthropy (phonetic) is the total
- 13 amount --
- 14 Q. No. Entropy.
- 15 A. Entropy, right. That's the total
- 16 amount of energy contained within a
- 17 given quantification, whether it be
- 18 ambient air, materials, whatever the

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- 19 total amount of heat.
- 20 Q. Define diffusion.
- Diffusion is the ability of water vapor 21
- 22 to move through a material.
- 23 Other than negative pressure and the Q.

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- 1 Second Law of Thermodynamics, are there
- 2 any other drivers that cause hot, moist
- 3 air to accrete on the back of a cool
- 4 wallboard? Can wind play a factor?
- 5 Wind -- you go back to negative
- 6 pressure: What -- what are things that
- 7 are create negative pressures. Yes,
- 8 wind can create a pressure
- 9 differential.
- 10 Would you agree with me that it's
- 11 important when you're looking at a
- 12 building to know which way it's facing.
- 13 east or west, and which way the storms
- 14 normally come in because windblown rain
- 15 can be a source of moisture?
- 16 It depends on what you identified as
- 17 your problem. If -- if you only have
- 18 one specific area or some isolated
- 19 areas, then you look for what those
- 20 isolated areas are exposed to versus
- 21 the areas that are not experiencing it.
- 22 Would you agree with me that
- 23 wind-driven rain can cause water

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- 1 damage --
- 2 A. Oh --

- 3 Q. -- in a wall?
- 4 A. -- yes, sir.
- 5 Q. So we've identified negative pressure,
- 6 the Second Law of Thermodynamics, wind
- 7 as a potential source. Are there any
- 8 others that you would identify as
- 9 drivers that can cause water to come in
- 10 a wall?
- 11 A. I mean, it's either going to come in as
- 12 a bulk, as a leak --
- 13 Q. I forgot that one. Bulk water leak
- would be the fourth one.
- 15 A. Well, actually, I mean, we're kind of
- 16 chasing our tail again because a bulk
- 17 water leak would be the wind-driven
- 18 leak. That's --
- 19 Q. Well, could be a plumbing leak.
- 20 A. Could be a plumbing leak.
- 21 Q. Could --
- 22 A. Water coming in by either bulk or
- 23 vapor.

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- 1 Q. So we've got negative pressure, the
- 2 Second Law of Thermodynamics. Do you Page 75

- 3 know that Boyle's Law of Gases is?
- 4 A. Can't -- can't quote it, but I've read
- 5 it. But I'm not -- I can't quote it
- 6 right now. Yes, sir.
- 7 Q. We've established negative pressure,
- 8 the Second Law of Thermodynamics, wind,
- 9 bulk water. Little bit of overlap
- 10 there. Are there any other drivers
- 11 that you can identify that can cause
- water accretion in a wall?
- 13 A. Well, again, the way you're stating
- 14 that, I just -- I can't -- what causes
- 15 that water accumulation is when more
- 16 comes in than can pass through. So,
- 17 you know, the more permeable the
- inside, the greater the margin of error
- 19 for -- for other things to go wrong.
- 20 Q. Do you have any data reflecting whether
- on each of these visits there was more
- or less water in the walls relative to
- 23 your other visits?

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- 1 A. No. The second visit is when I did all
- 2 of my testing. The third visit, I
- 3 didn't even go in the house. So there
- 4 was no one at home. Mr. Kelly came by,
- 5 I think, as I was finishing up; but he
- 6 was -- I think he was in a golf cart
- 7 headed somewhere so, I mean, he just Page 76

- 8 very briefly stopped and told me who he
- 9 was and told him who I was and what I
- 10 was doing.
- 11 Q. What I'm saying is, you don't have any
- 12 evidence to show from one visit to the
- 13 next that there's actually been a net
- 14 accumulation of water over time.
- 15 A. No. My visits -- all my testing came
- 16 from my second visit.
- 17 Q. You want to take a five-minute break?
- 18 A. Yeah.

- 19 Q. Let's do that.
- 20 (Brief recess)
- 21 Q. What year was this home built?
- 22 A. It was built on January 9th, 2003.
- 23 Q. Are you familiar with the HUD code

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- sections relating to wall design that
- were available to manufacturers in that
- 3 time period?
- 4 A. Yes, sir, I am.
- 5 Q. And would you categorize this
- 6 particular wall design as a design
- 7 enumerated in Section 3280.504(b)1?
- 8 A. Would I categorize it as that?
- 9 Q. Yes. Is this a (b)1 wall?
- 10 A. I would categorize it as that, but I
- 11 can't speak to what the intent of the
- 12 manufacturer was.

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- 13 Q. And you're familiar with (b)(2) walls.
- 14 A. Yes, sir.
- 15 Q. You're familiar with (b)(3) walls.
- 16 A. That is correct.
- 17 Q. At this time period, a waiver was also
- 18 available; correct?
- 19 A. Correct.

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- 20 Q. And I think you have opined in the past
- 21 that it was always possible for a
- 22 manufacturer to get an AC letter or
- 23 what is also called alternate

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- construction letter?
- 2 A. I believe that to be true.
- 3 Q. Among those choices that I've just
- 4 listed, other than (b)(1), what would
- 5 you consider to be a better alternative
- 6 feasible design for this home?
- 7 A. Anything that didn't place a continuous
- 8 vapor barrier. I mean, you could
- 9 utilize (b)(1) if you'd have done
- 10 without the vinyl wallboard. There are
- 11 methods out there that I have learned
- 12 hard and happy approved and stamped
- that allow you to build a (b)(1)
- 14 without the vinyl-covered wallboard.
- 15 So in my opinion, it's that continuous
- barrier of the vinyl-covered wallboard
- that's creating the problem here.
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- 18 Q. Well, what specific design choice are
- 19 you saying or will you say at trial
- 20 should Southern Energy have adopted
- 21 instead of this one?
- 22 A. One that works. Even if they're going
- 23 to adopt this one, it has to perform.

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- 1 It has to -- and we've been through
- 2 that before. But it -- in my opinion,
- 3 in order for that wall to function
- 4 properly, it should not be accumulating
- 5 moisture and mold growth.
- 6 Q. All right. Let's see if you can answer
- 7 my question. Which wall design, which
- 8 (b) -- to be or not to be. Which (b)
- 9 are we going to pick at trial for you?
- 10 What are you going to say is the one we
- should have done? Don't tell me "one
- that works." That's too vague. Tell
- 13 me which specific one you are
- 14 advocating as an alternative, feasible
- 15 design in this case.
- 16 A. One that blocks out as much moisture as
- 17 possible and lets what does come in go
- 18 through, whether that's (b)(1), (b)(2),
- 19 (b)(3), or the waiver. I don't care
- 20 which one you pick as long as you make
- 21 it work.
- 22 Q. So is it fair to say, sitting here Page 79

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23 today, you don't have a specific design

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- for an alternative feasible design on
- 2 this home?

- 3 A. There are many designs out there that
- 4 I've learned are DAPIA-approved that
- 5 would -- that I believe would function
- 6 properly.
- 7 Q. You're not an engineer.
- 8 A. Not an engineer.
- 9 Q. You're not a design professional.
- 10 A. No. I've not been utilized as a
- design -- I've been utilized to offer
- opinions and test these designs, but
- 13 I'm not an engineer or architect.
- 14 Q. You're not qualified under the HUD code
- 15 to draw and stamp prints for walls.
- 16 A. No, sir.
- 17 Q. Never had any building-science classes
- on how to construct walls under the HUD
- 19 code?

- 20 A. I don't know that there's a
- 21 building-science class offered that
- specifically addresses the HUD code,
- 23 that I'm aware of.

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- 1 Q. Is that a no?
- 2 A. No, because I'm not aware of any that
- 3 are available.
- 4 Q. But you've never gone to a day of
- 5 college in building science.
- 6 A. No, sir.
- 7 Q. No engineering, no architectural
- 8 experience.
- 9 A. Again, no, sir.
- 10 Q. So let me see if I can ask the question
- and get just an answer other than
- 12 everything else in the world. Do you
- have a specific design in mind for this
- 14 home that Southern Energy should have
- 15 utilized as an alternative feasible
- design that would have been better than
- 17 what they used?
- 18 MR. GOULD: Are you limiting
- 19 it to one?
- 20 MR. SIMPSON: I want him to
- 21 identify which one and
- 22 why.

23 Q. Just telling me all of them that work,

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- that's not an answer. Just tell me
- which design you're advocating and why.
- 3 A. Okay. Well, let's -- let's just start
- 4 with (b)(1) and go (b)(2) and then go
- 5 to (b)(3). Let's go to each of them

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6		and how they would work properly. A
7		(b)(3) wall, which is considered to be
8		a ventilated wall cavity, there is no
9		requirement to have a vapor barrier on
10		the living side whatsoever. So one way
11		of making the Murphy home comply to a
12		(b)(3) would simply be by using a
13		paper-covered wall on the interior of
14	٠	the house or something that had a high
15		perm rating, whether it be a paper-
16		covered paneling or a tape-and-texture,
17		and then drilling a I believe it's a
18		one-inch hole top and bottom of each
19		wall cavity to make it ventilated.
20		We're letting some some air in, but
21		we have a wall structure on the inside
22		that's going to let it pass through
23		without accumulation. So there's a
		UNCERTIFIED ROUGH DRAFT COPY
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		UNCERTIFIED ROUGH DRAFT COPY
1		(b)(3) wall that I've seen DAPIA
2		approval for that could have been
3		utilized in this house.
4	Q.	Any other designs that you're saying
5		should be or should be alternative
6		feasible designs for this particular
7		home?
8	Α.	Okay. Let's go to a (b)(2) wall. A
9		(b)(2) wall describes a wall that has
10		an external covering or sheathing that

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11	forms	а	pressure	envelope	of t	he bom	e .

- 12 and (b)(2) doesn't prescribe a vapor
- barrier on the living side. So (b)(2)
- 14 could have been used in this particular
- 15 home because we don't have the
- 16 wind-zone requirements that I've heard
- 17 some people speak of. And even when we
- 18 did, they could still -- they would
- 19 still be able to use, I guess, the
- 20 (b)(3) because they can ventilate --
- 21 they could ventilate the board. So the
- 22 (b)(2), I don't know the specifics.
- 23 I've not done one of those.

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- 1 And then let's back up to the
- 2 (b)(1).

- 3 Q. Well, let's start with (b)(2).
- 4 A. Okay.
- 5 Q. We've talked about this many times,
- 6 about the fact that (b)(2)'s just don't
- 7 exist. Would you agree with that?
- 8 A. No, I don't agree with that. I've
- 9 heard testimony that some (b)(2)'s were
- 10 built.
- 11 Q. Have you ever seen one?
- 12 A. I've never had one with a moisture
- problem. So no, I don't guess I have.
- 14 Q. Yes or no, have you ever seen one?
- 15 A. Again, I go to problematic homes. So

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- 16 no, I haven't seen one.
- 17 Q. Oh, you go to more than just
- 18 problematic homes. You put air
- 19 conditioners on lots of mobile homes
- 20 before you got in the expert business;
- 21 right?
- 22 A. Yes. But I wasn't -- I wasn't
- evaluating the homes and how they work.

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- 1 I was simply putting air conditioning
- 2 systems in.
- 3 Q. I've got 504(b)(2). There's a
- 4 scientific formula in there. Have you
- 5 ever used that?
- 6 A. No, sir, I haven't.
- 7 Q. And you --
- 8 A. Combined permeability rating?
- 9 O. Yeah.
- 10 A. I don't -- I don't recall. I know I've
- done some work with it with engineers
- 12 and people in the past, but I've not
- 13 produced anything or done that, no.
- 14 Q. You're not qualified to do the math.
- 15 A. Qualified --
- 16 Q. In (b)(2).
- 17 A. I've not had training and -- no.
- 18 Q. Never run these calculations in your
- 19 life.
- 20 A. No. My job has consisted of working

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- 21 with the engineers and the people that
- 22 do that.

23 Q. And you have personally never seen a

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- 1 (b)(2) wall in your life?
- 2 A. I can't say that I have or not. I've
- 3 not went out looking for them. But I
- 4 can say that I've not inspected a
- 5 (b)(2) with moisture problem because
- 6 I've not see one.
- 7 Q. So it's fair to say you've never seen a
- 8 (b)(2) in your life?
- 9 A. I can't say that I've never seen a
- 10 (b)(2) wall. I've never --
- 11 Q. Can you?
- 12 A. -- investigated looking for one. I
- 13 can't name one specifically that I did
- see, but I can't say that I never saw
- one because I've not been in -- many of
- 16 the houses I go to, I've not
- 17 investigated to see whether it's
- 18 (b)(1), (b)(2), (b)(3).
- 19 Q. Sitting here today, you don't know if
- you've ever seen a (b)(2) wall.
- 21 A. I can't say definitively that I have.
- I cannot say definitively that I have
- 23 not.

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- 1 Q. Just yes or no, Mr. Parks, or we're
- 2 going to be here all day. (B)(32).
- 3 A. You're wanting a definitive answer;
- 4 right?
- 5 Q. I just want to know if you've seen a
- 6 (b)(2) wall. And that to me seems like
- 7 a yes or no question. Have you ever
- 8 seen a (b)(2) wall? Yes or no.
- 9 A. Not that I can definitively identify as
- 10 a (b)(2). I may have seen (b)(2)'s
- 11 and -- and --
- 12 Q. So you don't know.
- 13 A. -- don't recognize it.
- 14 Q. You don't know.

- 15 A. No, I don't know.
- 16 Q. Have you ever seen a (b)(3) wall with
- 17 vinyl siding and blackboard?
- 18 A. I've seen the DAPIA approval for it.
- 19 Q. Have you ever seen one in the field?
- 20 A. Again, I've not examined those DAPIA
- 21 documents to see how it was -- yes, I
- 22 have seen walls that had vinyl siding
- 23 exterior sheathing, whether it be

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- 1 playing, OSB, or blackboard, and the
- 2 holes drilled top and bottom of every
- 3 wall cavity. Yes, I have seen those.
- 4 Q. And what evidence do you have that Page 86

- 5 those homes perform better than (b)(1)
- 6 walls?
- 7 A. Well, you asked me in my opinion if you
- 8 remove the vapor barrier from the
- 9 inside, which I have worked with many
- 10 manufacturers and done that. So I'm
- basing that my experience that it will
- 12 work. I don't have any documentation
- 13 that I can offer up other than the
- 14 DAPIA-approved drawings that I have
- 15 viewed in some of these other cases
- 16 from NTA.

- 17 Q. But none of the DAPIA-approved drawings
- say one way or the other whether the
- 19 wall performs better or worse from
- 20 condensation control standpoint; right?
- 21 A. I really couldn't tell you that, no.
- 22 Q. So it would be an honest answer for you
- 23 to say that you don't have any

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- 1 authoritative evidence to suggest one
- way or the other whether a (b)(3) wall
- 3 is better or worse than a (b)(1) wall.
- 4 A. Authoritative evidence, yeah. I
- 5 think -- I think we've produced a ton
- 6 of authoritative evidence that says
- 7 that placing a vapor barrier on the
- 8 living side of the wall is detrimental
- 9 to the wall cavity.

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- 10 Q. But what evidence do you have that
- 11 (b)(3) is better than (b)(1)?
- 12 A. I would say that same -- that same
- 13 evidence talks about, you know,
- 14 removing or not having a low-perm
- surface on the interior side. Well,
- 16 that's -- (b)(1) -- (b)(3) doesn't
- 17 require that.
- 18 Q. Would you agree with this statement?
- 19 Moisture accumulation on the back side
- of a wallboard is a function of a
- 21 couple of things. One would be the
- 22 ability for the board to dry to the
- 23 inside.

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- 1 A. That would be a factor.
- 2 Q. The ability of the board to dry to the
- 3 outside.
- 4 A. That could be a factor.
- 5 Q. And the amount of air that touches the
- 6 board; in other words, the volume or
- 7 concentration of air that flows through
- 8 there.
- 9 A. That accumulates within that cavity,
- 10 not just what touches the board but
- accumulates within that cavity, yes,
- 12 sir.
- 13 Q. And you would agree with me that a
- (b)(3) wall gives greater opportunity Page 88

- for air to accumulate in the cavity.
- 16 A. Absolutely. But the walls that I'm
- 17 familiar with that I've seen that did
- 18 not use a vinyl covering had no
- 19 problem.
- 20 Q. Do you have any scientific journal.
- 21 authoritative treatise, article,
- 22 anything that has studied and compared
- 23 (b)(1) walls versus (b)(3) walls in the

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- 1 context I'm asking you about right now
- 2 to show that one is better or worse
- 3 than the other?
- 4 A. I think that all the information that
- 5 we've provided substantiates that
- 6 theory that placing a continual vapor
- 7 barrier on the living side is not going
- 8 to perform; therefore, having a wall
- 9 with a higher perm rating will perform
- 10 better. So even though it doesn't --
- 11 it doesn't specifically name HUD
- 12 standards (b)(1), (b)(2), the
- 13 scientific -- or the science behind it
- 14 is --
- 15 Q. Well, that's my point. There's no --
- 16 A. Yeah.
- 17 Q. There's no specific piece of paper that
- 18 you can point to authoritative that
- specifically compares (b)(1) to (b)(3)
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- 20 from a study standpoint and shows that
- one is better or worse than the other.
- 22 A. Not one that specifically quotes (b)(1)
- 23 and (b)(3).

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- 1 Q. So in your opinion, Southern Energy
- 2 should have used (b)(3) as an
- 3 alternative feasible design in this
- 4 setting.
- 5 A. They could have, as well they could
- 6 have used (b)(1).
- 7 Q. And what should they have done in
- 8 (b)(1)?
- 9 A. I've seen Southern Energy's own designs
- where they used a tape and texture and
- used a Kraft-back paper which meets the
- 12 technical requirement of vapor barrier
- 13 less than one perm but it's not
- 14 continuous. It's folded back between
- 15 each wall -- each wall stud. So now
- 16 the wallboard is able to breathe,
- 17 but -- and I've seen many homes in this
- 18 manner that -- I've never seen a
- 19 home -- one that -- where the wallboard
- 20 is falling apart. And I've recently
- 21 seen over the last few months DAPIA
- 22 approval for that methodology.
- 23 Q. Is it your testimony that Southern

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<pre>1 Energy should</pre>	have	used	or	could	have
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- 2 used a Kraft-back paper turned to the
- 3 inside and that that would have been a
- 4 better design?

- 5 A. And then a paper-covered wallboard
- 6 like -- like they're doing right now, a
- 7 paper-covered wallboard or a tape and
- 8 texture, something that removes that
- 9 vapor barrier from the inside of that
- 10 gypsum board. And that would have been
- 11 a much better design.
- 12 Q. Have you ever given an opinion that
- 13 Kraft-back turned to the inside is
- 14 basically no better?
- 15 A. It's not optimal and it's still not
- 16 right, but it works way better and I've
- 17 never seen the gypsum board fall apart.
- 18 Q. All right. Well, none of these gypsum
- 19 boards are falling apart in the Murphy
- 20 home.

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- 21 A. I disagree.
- 22 Q. Can you show me one wallboard that's
- falling apart or a picture of one?

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- 1 A. I can -- I can show you through there
- 2 and I'll be glad to go take some more

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- 982parks.rough depo.txt pictures. And I do have some pictures
- 4 of the areas where the bumps are on the
- 5 house.

- Q. Okay. Where are those?
- 7 A. I think I have a couple maybe on my
- 8 laptop. I did not use them -- utilize
- 9 them in any of my reports.
- 10 Q. Okay. Well, you understand that your
- time for expert report has come --
- 12 A. I know.
- 13 Q. -- and gone.
- 14 A. I know. And those aren't used in
- 15 there. I can only testify as to what I
- 16 saw, but --
- 17 Q. Well, show me in your report where you
- 18 show evidence of a degrading wallboard.
- 19 A. As I said earlier, I did not put that
- 20 picture in my report.
- 21 Q. So you've got no pictures of degrading
- 22 wallboards in your report.
- 23 A. No, not within my report. Only what I

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- 1 saw in the field.
- 2 Q. Are there any other alternative
- 3 feasible designs that you have
- 4 authoritative sources which indicate
- 5 that there is a better design than
- 6 (b)(1) among the other choices in the
- 7 HUD code?

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- 982 parks.rough depo.txt Other than (b)(1), I would say other 8
- 9 than the use of vinyl-covered wallboard
- 10 is what we spoke of. But --
- But you don't have any --11 ο.
- 12 -- I'm --Α.
- 13 What I'm looking for is any
- 14 authoritative sources, testing,
- 15 studies, anything to show that (b)(2)
- is better than (b)(1) or that (b)(3) is 16
- 17 better than (b)(1) or that the waiver
- 18 is better than (b)(1). I'm not aware
- 19 of any such studies, if they exist.
- 20 And that's -- the studies that
- specifically name (b)(1), (b)(3), no, 21
- 22 sir, I do not.

23 Well, or the other designs, whether

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- 1 they name them that way or not, they --
- 2 The -- yes, whether they name them that
- 3 way or not, the principle, the science
- behind it, is spoke about in every one 4
- 5 of the articles that I've offered up.
- 6 But where are they compared and
- 7 analyzed from a comparison standpoint?
- 8 Do you have anything in your array of
- exhibits that you can point me to? 9
- 10 Well, my study, the removing the
- 11 barriers, which are the homes where I
- 12 removed the vinyl wallboard from the

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13	inside	and	monitored	those	walls	over	a

- 14 period of the entire summer
- 15 definitively shows that the wallboard
- 16 with the -- without the vinyl works
- 17 better than the nonvinyl. And one of
- 18 the -- I have one house which -- in
- 19 there which has a Kraft-back turned to
- 20 the inside in addition to the vinyl
- 21 wallboard. So -- and -- and that's on
- one of them that's removed. So --
- 23 Q. Other than your studies, are there any

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1 others?

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- 2 A. Not -- not that specifically depicts
- 3 the (b)(1)/(b)(3) comparison as named.
- 4 Q. And your study has never been
- 5 peer-reviewed?
- 6 A. Not yet, no, sir.
- 7 Q. It's not published in any journal.
- 8 A. No, sir.
- 9 Q. It's never been scientifically
- validated by anyone other than you;
- 11 correct?
- 12 A. Not at this point. Ask me again next
- week.
- 14 Q. And who is evaluating it right now?
- 15 A. Building Science Corporation Joseph
- 16 Lstiburek and John Straub.
- 17 Q. Are these people that are now joining

982parks.rough depo.txt your expert team? Have you had

- 18
- 19 discussions with them about that? You
- 20 have to answer truthfully.
- 21 Α. Yes.
- 22 Q. And have you retained them now?
- 23 I'm not aware of the status. Α.

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- Are they actively working on houses 1
- 2 with you?
- 3 I'm not aware of -- they've not
- 4 actively been to a home with he.
- 5 Have you had conversations with them
- 6 where discussions were had that they
- 7 might start consulting with the Beasley
- 8 team on these homes?
- 9 Α. Yes. sir.
- 10 And tell me about those conversations ο.
- 11 and what was said.
- 12 I was recently at a building science --
- 13 continuing education building science
- 14 fundamentals with Joseph Lstiburek and
- 15 John Straub. I've actually known
- 16 Joseph Lstiburek for several years,
- been to his home and to the Westford 17
- 18 symposium. We've had conversations in
- 19 the past. He does -- he doesn't do the
- 20 expert work; however, Dr. Straub does.
- 21 And there was a conversation of --
- 22 actually, Joseph Lstiburek has agreed

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23	to	go	 or	volunteered	to	go	with	me

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- 1 to the Manufactured Housing Consensus
- 2 Committee, if granted an audience, to
- 3 present the presentation and to support
- 4 the change in the standard that I have
- 5 submitted.

- 6 Q. You have submitted a standard to the
- 7 consensus committee?
- 8 A. I have.
- 9 Q. Where is that? Do you know?
- 10 A. That's the removing the barriers, and
- 11 the form is with it. It's already been
- 12 given to Robert Solomon at NFPA.
- 13 Q. So Mr. Lstiburek has agreed to travel
- 14 with you to any kind of consensus
- 15 committee presentation?
- 16 A. He -- he asked to go. He wanted to go
- 17 to that. He volunteered on his own.
- 18 Q. Is he playing any part or receiving any
- income in expert advice in the Beasley
- 20 homes?
- 21 A. No, sir, he's not.
- 22 Q. The other fellow, Dr. Straube?
- 23 A. Yes, sir.

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1 Q. What is his full name?

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